care health plan; patients were followed until death, disenrollment from the health plan, or 12/31/2008. Health care costs in the 24 months prior to death/end of follow-up were calculated, divided into 4-month periods to assess trends over time. Chi-square statistics were used to compare patients who died vs. those alive at the end of the study on health care costs, comorbidity, clinical, and demographic characteristics. **RESULTS:** 260 CRPC patients died, with 2304 patients alive at the end of the study (mean age 73.99 vs. 72.63 years, p=0.035). 2 years prior to death/end of follow-up, comorbidity scores were similar and mean total costs per 4-month period were not significantly different for patients who died vs. those alive ($8,292 vs. $6,809, p=0.060). Health care costs increased prior to death, with the sharpest increase in the last 4-months of life with mean costs roughly tripling (from $15,185 to $44,203). For patients who did not die, mean total costs increased by one-third in each 4-month period, from $6,809 to $13,170 at the end of follow-up. **CONCLUSIONS:** Although costs were initially similar for CRPC patients who died compared to patients alive at study end, patients who died had significantly larger increases in costs over the 2-year period, with the sharpest increase in the last year prior to death.

PCN40

HEALTH CARE UTILIZATION AND COSTS OF RESECTED SQUAMOUS CELL CARCINOMA OF THE HEAD AND NECK (SCCHN) IN AN INCIDENT COHORT OF PATIENTS IN THE UNITED KINGDOM

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OBJECTIVES: 7,538 new cases of SCCHN were diagnosed in 2006 and 2,594 deaths reported in 2007 in the UK. For patients with resectable SCCHN surgical resection followed by postoperative radiation therapy remains a common treatment approach. For locoregional disease control chemotherapy is also an important treatment component. **METHODS:** This retrospective analysis was based on inpatient and outpatient records extracted from Hospital Episode Statistic database. SCCHN patients with resection of oral cavity, pharynx or larynx between 2003-07-01 and 2008-03-31 were followed for at least one year (max. of 5 years) from the surgery date. **RESULTS:** There were 38,460 patients diagnosed with SCCHN in the dataset. 11,403 patients met the inclusion criteria for the study. Mean age was 63.2 years and 69.8% were male. Mean length of follow-up was 31.0 months. In the first year, mean length of hospitalization was 21.6 days and mean number of outpatient visits was 4.2. Mean number of reconstructive and secondary surgeries per patient was 0.32 and 0.14, respectively in the first year. Mean number of radiotherapy and chemotherapy sessions per patient was both 0.45 in the first year. Total costs of post-operative healthcare utilization in the patient cohort was £249.4 million over 5 years with 90% (£225.5 million) occurring within the first year. Mean cost was £19,778 for the first year and £1477, £847, £653 and £455 for years 2-5. Inpatient care costs accounted for 96% of total costs with hospitalization contributing to 85% of these costs. **CONCLUSIONS:** Given limited outpatient data in the HES, radiotherapy and chemotherapy utilization and costs in the outpatient setting are likely to be underestimated. However, results still indicate that treatment of resected SCCHN in the UK is associated with significant healthcare utilization and costs. This suggests the need for new therapies that could improve outcomes and reduce the economic burden.

PCN41

FINANCIAL BURDEN AMONG PATIENTS WITH MAJOR CANCERS: FINDINGS FROM THE UNITED STATES MEDICAL EXPENDITURE PANEL SURVEY, 1996-2007

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OBJECTIVES: Out-of-pocket (OOP) medical expenditures of families may pose a financial burden, particularly to the seriously ill. The objective of this study was to analyze financial burden among patients with three common cancers: breast cancer (BC), colorectal cancer (CRC), and lung cancer (LC). **METHODS:** This study included respondents in the US Medical Expenditure Panel Survey who had 1+ BC (ICD-9-CM 174.xx), CRC (ICD-9-CM 153.xx, 154.xx), or LC (ICD-9-CM 162.xx) diagnosis between 1996 and 2007. Matched comparison cohorts (without cancer) were constructed for each cancer type, based on age, payor, sex, race and region. All years of data were pooled and weighted to create nationally representative average annual estimates reported in 2009 USD. OOP family medical expenditures (not including premiums), and family income were analyzed. Families were defined as having a high OOP burden if their OOP expenditures exceeded 10% of annual family income (5% if low income). **RESULTS:** 1,849 patients with cancer were identified (1,083 BC, 467 CRC, 299 LC). Total OOP expenditures averaged $3,400 - $4,400 for cancer patients versus $2,100 - $2,700 for controls. Overall, 31-37% of cancer patients had high OOP burden (31% BC, 37% CRC, 35% LC), compared to about a quarter of matched comparison patients. Among those under age 65, 16-30% of privately insured had high burden. Among those 65+, more Medicare-only patients had high burden (48-53%) compared to those with Medicare plus other insurance (29-36%). **CONCLUSIONS:** Over a third of cancer patients have OOP expenditures greater than 5-10% of their household income. Privately insured patients appear least likely to have high burden while publicly insured appear most likely. To ensure that cancer patients can adequately access needed medical care, exploration of how US health reform or other policy options could reduce this financial burden is warranted.

PCN42

COSTS OF HOSPITAL EVENTS IN PATIENTS WITH METASTATIC COLORECTAL CANCER

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OBJECTIVES: Monoclonal antibodies improve treatment outcomes in patients with metastatic colorectal cancer (mCRC); they have distinct and known safety profiles that may be associated with toxicities requiring hospitalization, which likely further impact cost of patient care. The objective of this study was to determine hospital costs of these events. **METHODS:** From the PHARMO Record Linkage System, including drug dispensing and hospitalization records of approximately 3.2 million residents in The Netherlands, all patients with a primary or secondary hospital discharge code for CRC and distant metastasis between 2000 and 2008 were defined as patients with mCRC. The first discharge diagnosis defining metastases served as the index date. Patients were followed from index date until end of data collection, death, or end of study period, whichever occurred first. Main outcomes for each identified event were length of stay (days) and costs per hospital admission (€). All results are presented descriptively. **RESULTS:** Among 2,964 patients with mCRC identified, 271 hospital events occurred during a median follow-up of 24 months. The longest mean (± SD) lengths of stay per hospital admission were for stroke (16 (± 33) days) and arterial thromboembolism (ATE) (14 (± 21) days), followed by wound healing complications (WHC), acute myocardial infarction (AMI), congestive heart failure (CHF), and neutropenia (all 9 days with SD 5 to 15). Highest mean (± SD) costs per admission were observed for stroke (€13,500 (± €28,800)), ATE (€13,300 (± €18,800)), and WHC (€10,800 (± €20,500)), followed by AMI ((€9,000 (± €7,300)), neutropenia (€7,900 (± €4,400)), and CHF (€7,700 (± €6,300)). Lowest mean (± SD) costs were for dermatological toxicity (€5,400 (± €5,200)) and hypertension (€4,100 (± €2,800)). **CONCLUSIONS:** Inpatient costs for events in patients with mCRC are considerable and vary greatly. Such data are valuable to the pharmacoeconomic evaluations of newer treatments in patients with mCRC.

PCN43

STUDY ON MEDICAL EXPENDITURE AND PAYMENT PATTERNS OF INSURED PATIENTS WITH CANCER IN CHINA

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OBJECTIVES: To study the medical expenditure of insured patients with cancer and its influence factors, to analyze the utilization of pharmaceuticals, treatment-seeking behavior and the relationship between the medical expenditure and payment patterns of medical insurance. **METHODS:** This study involved 5351 cancer cases in 3 municipalities (Beijing, Shanghai, Chongqing) and 5 province-capital cities (Shenyang, Fuzhou, Jinan,Zhengzhou, Xining).The actual claim data of their medical expenditure and medical care utilization in 2008 were collected. Descriptive analysis and multivariate linear regression analysis were applied. **RESULTS:** 1) Outpatient's annual medical expenditure per head was US$802 and inpatient's annual medical expenditure per head was US$6200. Although the basic medical insurance (BMI) fund covered about 70% of the expenditure, the patients' economic burden is still heavy. 2) Western medicine cost accounted for 44% to 60% of the inpatients' medical expenditure in various cities. Cytotoxic drug usage accounted for over 80% of the anti-tumor drugs. 3) The proportion of the patients who sought outpatient and inpatient treatment in the third level hospitals was 81% and 74 %, respectively. 4) Multivariate linear regression analysis showed that the main influence factors of inpatients' medical expenditure include medical insurance payment pattern, hospital level, category of cancer, gender, length of stay in hospital, and medical insurance type. When all factors other than payment pattern were set to be control parameters, inpatient's annual medical expenditure per head under flat rate payment was US$348 lower than that under fee-for service. **CONCLUSIONS:** Medical expenditure causes heavy burden for cancer patients and the BMI fund. Flat rate payment has proved to be more effective in expenditure control compared with fee-for service. To keep the fund safe and running effectively, it is necessary to adjust present payment patterns and set rational payment standard to encourage medical care providers to control the expenditure actively.

PCN46

HEALTH CARE EXPENDITURES, DISABILITY DAYS, AND RESOURCE UTILIZATION ASSOCIATED WITH CANCER IN EMPLOYER SETTINGS IN THE UNITED STATES

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OBJECTIVES: To assess healthcare expenditures, disability days, and resource utilization in persons with cancer that were employed within large and small organizations in the United States. **METHODS:** This retrospective database analysis utilized 2007 Agency for Healthcare Research and Quality (AHRQ) Medical Expenditure Panel Survey (MEPS) public-use data. Inclusion criteria included age ≥18 years, any diagnosis of malignant neoplasms (including both new cases and those continuing treatment), and employment within either large or small organizations (≥500 or <500 employees, respectively). Regression analyses were performed via gamma or negative binomial generalized linear models for outcomes of total direct healthcare expenditures, number of disability days, and summed resource utilization (outpatient visits, emergency department visits, hospitalizations) after controlling for predominant cancer types and other factors including demographics (age, sex, race, education, region, income, residence), insurance coverage, employer size, perceived health status, secondary malignancies, and the D'Hoore-Charlson Comorbidity Index. To provide national estimates, all results were weighted and used standard errors (SE) calculated via Taylor-series approaches. **RESULTS:** Overall, 3.86 million employed adults in the US had new or continued cases of cancer in 2007, averaging 54.0 (SE=0.9) years of age, 9.3 (SE=1.8) disability days, and $15,365 (SE=2921) in expenditures. Most were employed within